

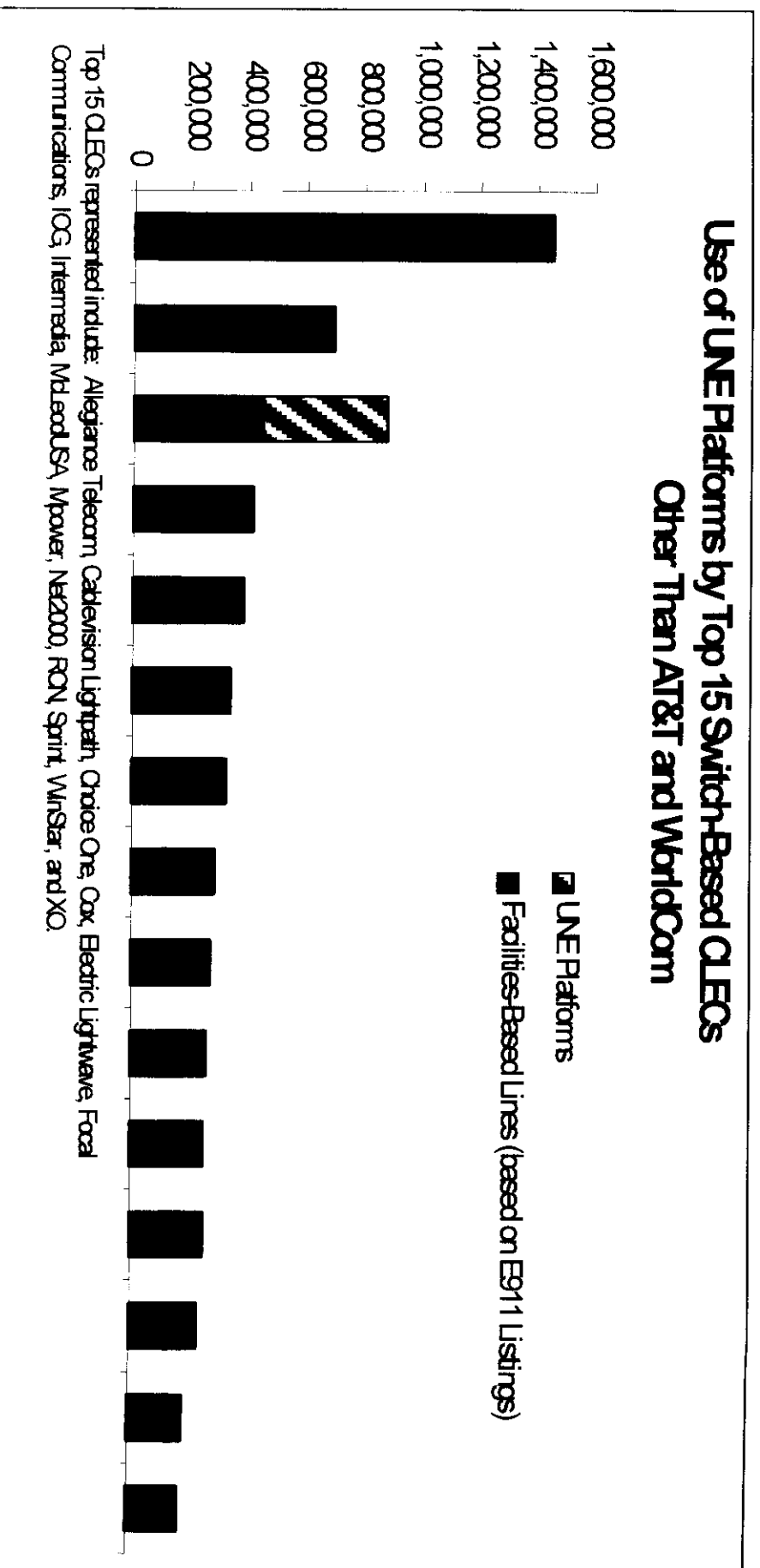
# *Proposed Solutions*

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- FCC can help stabilize network economics by:
  - Limiting the number of UNEs available at TELRIC, especially switching and transport
  - Act quickly on Triennial review
  - Adopt policies that encourage investment
    - Broadband NPRM
    - TimeWarner/BellSouth framework
  - Adopt policies that reward sound financial management
    - Approve deposit tariffs
    - Avoid actions that reward bankruptcy and fraud

# Proposed Solutions

- Other than AT&T and WorldCom, the 15 largest CLECs that have deployed switches make virtually no use of UNE-P



Source: Based on E911 listings

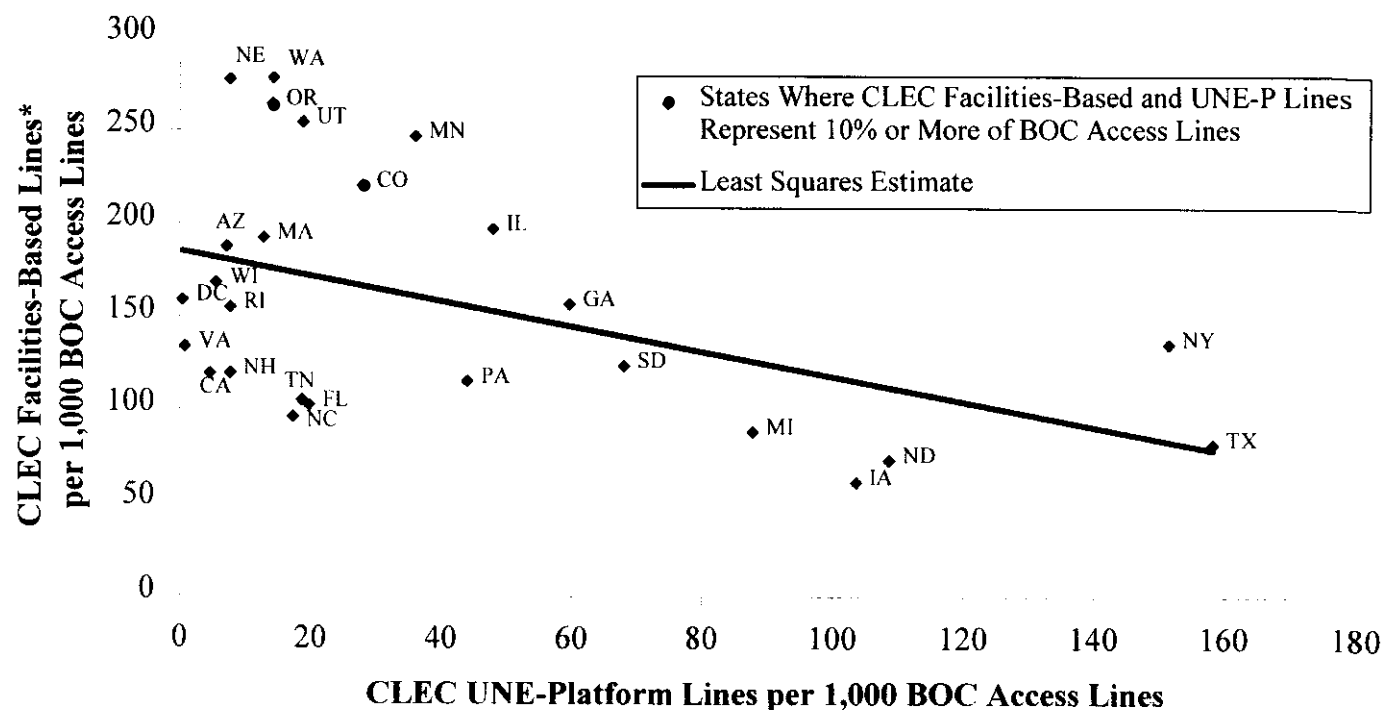
Fact Report reference: p. I-9

# Proposed Solutions

## The Availability of UNE P Decreases the Level of Facilities-Based Competition

- Data from all states with significant CLEC entry demonstrate that the availability of the UNE-P decreases the level of facilities-based competition.

**Figure 1. Facilities-Based Competition Decreases as UNE-P Penetration Increases**



\*Facilities-based lines are based on CLEC E911 listings as of year-end 2001.

# *Proposed Solutions*

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## **Proposed Solution – Eliminate UNE-P Telric**

- In New York, AT&T and WorldCom together provide UNE-P service to over 1M residential customers
- AT&T and WorldCom operate 28 local circuit switches in New York
- Yet the two companies have converted virtually none of these UNE-P customers to service utilizing their own switches
- Arbitrage opportunities are too rich to encourage new investment or even use of existing investment

Fact Report reference: pp. 11-18-19

## ***Proposed Solution***

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- **While UNE-P does nothing to create sustained investment in Competitive networks, it does create huge concerns about the financial viability of the ILEC.**

### **Recent Analysts comments:**

#### **Deresdener Kleinworth Wassatein\***

“From an macroeconomic point of view there are general concerns with the UNE-P system:

- It's a policy-stimulated transfer of wealth (from shareholders and employees to consumers), rather than being left to market forces.
- In the longer-term it could rob consumers of advanced services that require the RBOC's plentiful cash flow to fund.
- Asset write-downs will cause “stock-shock” and a shock to the telecom “supplier system.”

\* UNE-P: The Un-Profitable RBOC (August 9, 2002)

# ***Proposed Solution***

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## **Recent Analysts comments: (continued)**

### **UBS Warburg\***

“Economics of UNE-P are Worse than we Originally Expected.

- UNE-P lines generate negative EBITDA in 18 States for the Bells (60% of US residential lines)  
    . . . . .
- Long Distance Opportunity is only a Partial Offset
  - Bells only need to add 1.3 Long Distance Customers for each UNE-P line added to break even at revenue line.
  - However, the Bells need to add 5.4 Long Distance Customers for each UNE-P line added to break even at EBITDA line.
  - “UNE-P IS AN EBITDA STORY, NOT A REVENUE STORY”

### **Solomon Smith Barney\*\***

- “From a Bell perspective, as we’ve written many times over the past several months, this is a nightmare. They get half the revenue with the same cost.”

\* The Regional Bells: How Much Pain from UNE-P

\*\* SBC Communications Report (July 23, 2002)

# ***Proposed Solution***

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## **Recent Analysts comments: (continued)**

### **Commerce Capital Markets\***

- “For the CLECs, the lower UNE rates present the opportunity to enter the local market with minimal up-front investment.
- From the RBOC – investor’s perspective UNEP presents several problems. One is the reduction in revenues that comes from converting retail to wholesale revenues. The other is the pricing compression that comes from the RBOC’s an attempt to restructure their prices to compete with new entrants. Finally, there is the exposure during a period when an RBOC cannot yet enter long-distance, but the IXC’s have begun to enter its local market.”

### **Percursor Group\***

- “There is a “telecom debt spiral” where over-capacity is not getting worked out of the system, but comes back less leveraged and on competitive steroids. The trends toward data and wireless present profit-challenged growth; and regulator-priced “competition” continues to deflate profits.”

\* The States of 271 and UNE-Platform in the Regional Bell Territories (August 22, 2002)

\*\* Percursor Investment Perspective (April 3, 2002)

# ***Proposed Solution***

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**Eliminate transport as UNE (unnecessary for competition) and continue special access protections.**

## **Special Access Facts**

- 1985 – Teleport Provides Transport Services for special access to business customers in NY
- 1986 – 16 States authorize special access competition
- 1995 – 29 CAPS serve 100 cities with 21K fiber route miles
- 2001 – 1800 networks serve 70% of US population, 150 largest MSAs. 91/100 top MSAs served by 3 networks, 77 by 7, 59 by > 10.

Source – UNE Fact Report 2002, p.K-1



## *Proposed Solutions*

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- FCC can help stabilize network economics by:
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  - Act quickly on Triennial review
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    - Broadband NPRM
    - TimeWarner/BellSouth framework
  - Adopt policies that reward sound financial management
    - Approve deposit tariffs
    - Avoid actions that reward bankruptcy and fraud

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# Back-Up

**Class-of-Service specific and Market-based rates** - No distinctions were allowed in the original FCC order with respect to the rates charged for similar services offered to different types of customer . This unfairly and uneconomically put the ILEC at a competitive disadvantage as ILEC residential and rural rates have been subsidized by PSC-mandated higher rates on urban and business customers. CLECs have exploited this inequity by reselling ILEC services (purchased at wholesale rates that do not bear the cost of subsidizing rural and residential service) to those customers and markets that bear the brunt of the subsidies. ILECs should be afforded the flexibility to charge market-based rates that minimize subsidies.

**Impose sunset limits on UNE-P** - UNE-P at TELRIC should have a “date certain” by which CLECs will have had time to overcome any impairment and economically build facilities of their own. Unbundled elements will still be available, but at market-based rates.

**Restrict UNE-P to non-competitive areas** - Consistent with the Supreme Court ruling that requires regulators to give more consideration to the availability of alternative facilities when deciding what, and where, facilities are to be unbundled, unbundled elements should only be available in areas where CLEC’s ability to offer service would be impaired without them. According to the Supreme Court: “... the Commission assumption that any increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element ‘necessary’ and causes the failure to provide that element to ‘impair’ the entrant’s ability to furnish it’s desired services is simply not in accord with the ordinary and fair meaning of those terms.”

**Continue “safe-harbor” local service restrictions** - This refers to unbundled dedicated transport. IXC’s, CLEC’s, and CMRS carriers have tried to convert existing special access facilities, over which they are currently providing non-local services at a profit, to unbundled elements. This is simply a play to transfer hundreds of millions of dollars of wealth from ILECs to these carriers. The fact that they are currently profitable proves that impairment does not exist. Further, in most areas where these facilities exist in significant quantities, there are several non-ILEC providers of dedicated transport.

**Move to “Bill and Keep” with respect to interconnection** - This refers to requiring carriers to recover the call termination costs from their own customers rather than from the originating carrier. This could be done through a flat or usage-sensitive structure determined by the market.

# Wholesale Reductions in Average Margin Per Line

Back-Up

- Dramatic declines in price relative to Retail, combined with little change in costs literally bleeds profitability out of the ILECs as CLECs cream-skim the most profitable customers.

Residence Migration	Retail	Resale	UNE Combo	UNE Loop	Bypass
<b>Revenues</b>					
Basic service	27.71	21.65	21.59	16.23	0.00
Features & Other Svcs	7.35	5.47	1.17	0.00	0.00
SWA/ LIC	5.52	5.52	0.07	0.00	0.00
<b>Total</b>	<b>40.58</b>	<b>32.64</b>	<b>22.83</b>	<b>16.23</b>	<b>0.00</b>
<b>Expense</b>					
Basic service	10.98	11.31	12.05	6.59	4.43
Features & Other Svcs	0.95	0.98	0.98	0.00	0.00
SWA/ LIC	2.34	2.34	0.59	0.00	0.00
<b>Total</b>	<b>14.26</b>	<b>14.62</b>	<b>13.62</b>	<b>6.59</b>	<b>4.43</b>
<b>Product Contribution</b>	<b>26.32</b>	<b>18.02</b>	<b>9.21</b>	<b>9.64</b>	<b>(4.43)</b>
Percent Change from Retail		-32%	-65%	-63%	-100%

Business Migration	Retail	Resale	UNE Combo	UNE Loop	Bypass
<b>Revenues</b>					
Basic service	51.40	43.57	24.76	16.23	0.00
Features & Other Svcs	10.35	5.47	1.17	0.00	0.00
SWA/ LIC	5.52	5.52	0.07	0.00	0.00
<b>Total</b>	<b>67.28</b>	<b>54.56</b>	<b>26.00</b>	<b>16.23</b>	<b>0.00</b>
<b>Expense</b>					
Basic service	8.63	8.84	7.96	6.59	4.43
Features & Other Svcs	0.89	0.98	0.98	0.00	0.00
SWA/ LIC	2.34	2.34	0.59	0.00	0.00
<b>Total</b>	<b>11.86</b>	<b>12.15</b>	<b>9.53</b>	<b>6.59</b>	<b>4.43</b>
<b>Product Contribution</b>	<b>55.41</b>	<b>42.41</b>	<b>16.47</b>	<b>9.64</b>	<b>(4.43)</b>
Percent Change from Retail		-23%	-70%	-83%	-100%

**NOTE:** Product expenses shown in these tables include only costs that are directly driven by the product. Product contributions must be sufficient to cover costs that are not product-specific, including all business overheads, and taxes. These non-product specific costs generally represent 45% of total corporate expenses.

## *Current State of BellSouth's Wireline Business – Cost Structure* Back-Up

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### ■ Let's Lay Out Our Cost Actions:

- » Eliminated x,xxx jobs
- » Voluntary Furlough
- » Cut Travel / Training
- » Cut Capital \$1.8 billion
- » Etc.
- » Only gave 2% raises
- » Cut bonuses

### ■ Meanwhile:

- » IT costs <sup>↑</sup>are up xx% due to increase of wholesale activity
- » SEEMS <sup>↑</sup>
- » Reciprocal Compensation <sup>↑</sup>
- » Independent Company Settlements
- » Bad Debt
- » Pension & Benefit Costs

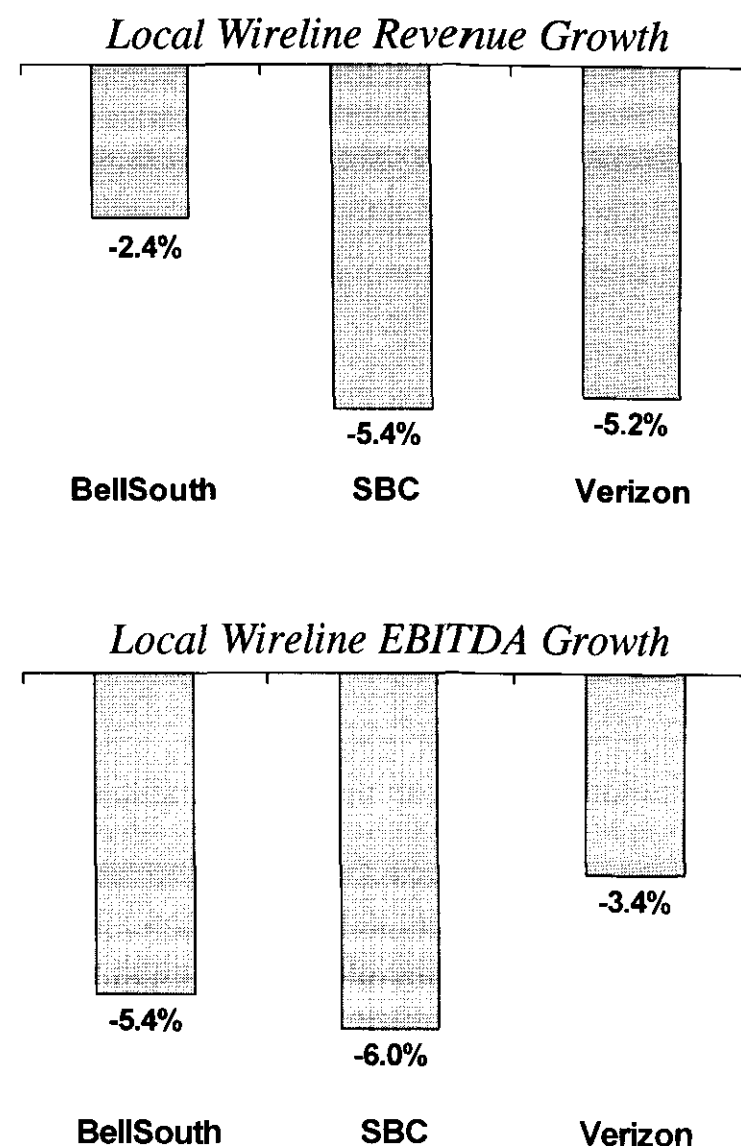
# Second Quarter 2002 ILEC Highlights

Back-Up

- Second quarter 2002 results demonstrate that the issues facing BellSouth's business are common to the other ILECs.

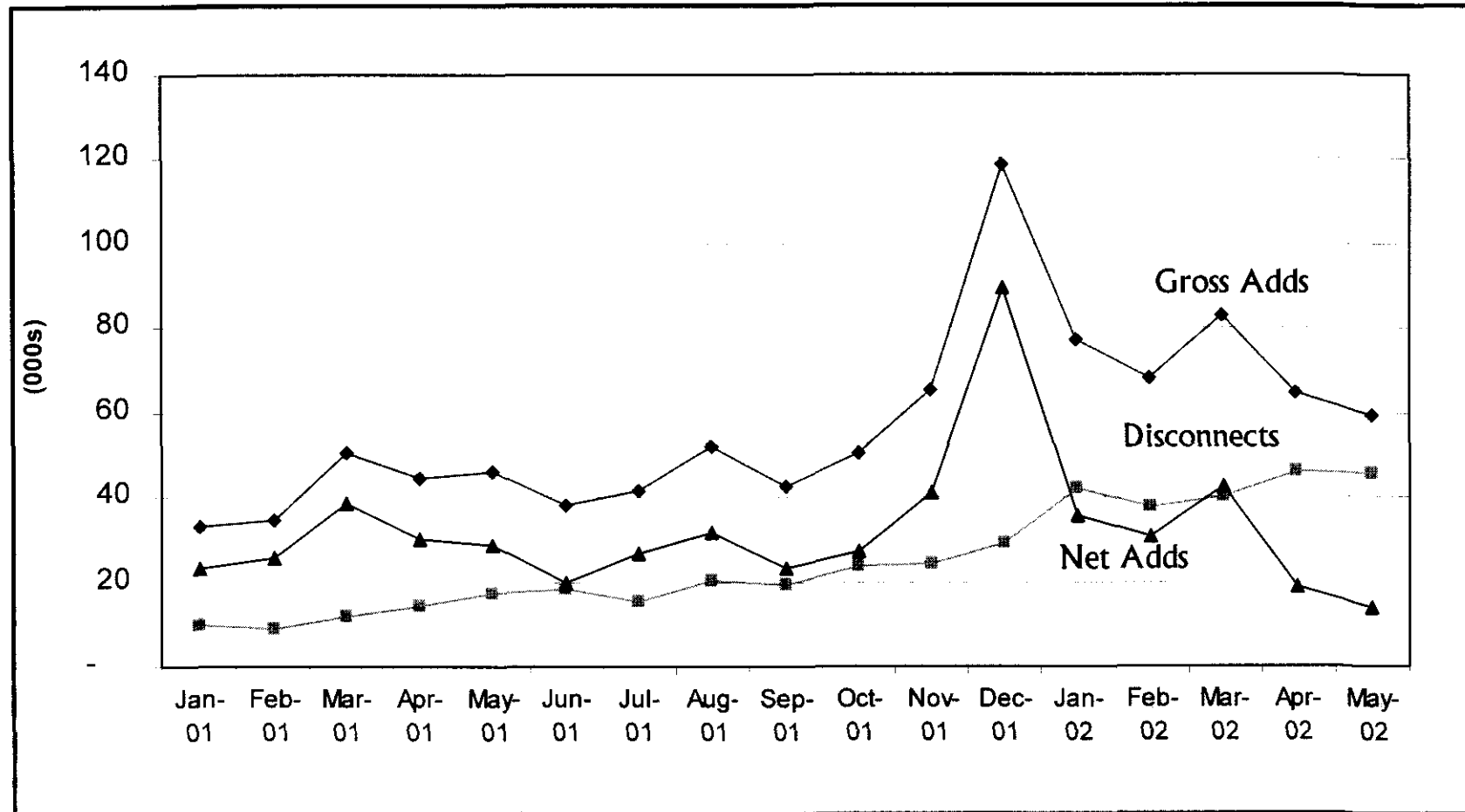
	BellSouth	SBC	Verizon
<b>Data Growth*</b>	6.0%	7.5%	7.5%
<b>DSL Sec Qtr Subscriber Growth</b>	10.3%	14.1%	11.1%
<b>Access Line Growth</b>	-2.1%	-3.8%	-3.3%
<b>VGE Growth</b>	13.8%	4.6%	7.9%
<b>Access MOUs</b>	-10.4%	-4.9%	-7.4%

Source: Company Reports



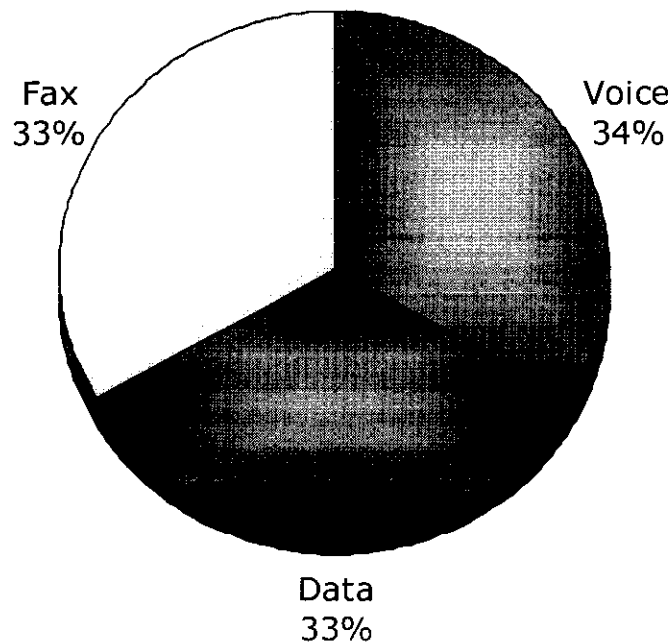
## Current State of BellSouth's Wireline Business – New Products Back-Up

- By year-end 2002, BellSouth will have invested \$2.6 billion in Broadband deployment and provide coverage to 74% of in-region households. However, slowing subscriber growth coupled with monthly churn rates in excess of 5% provide evidence that the “early adopter” stage is complete.

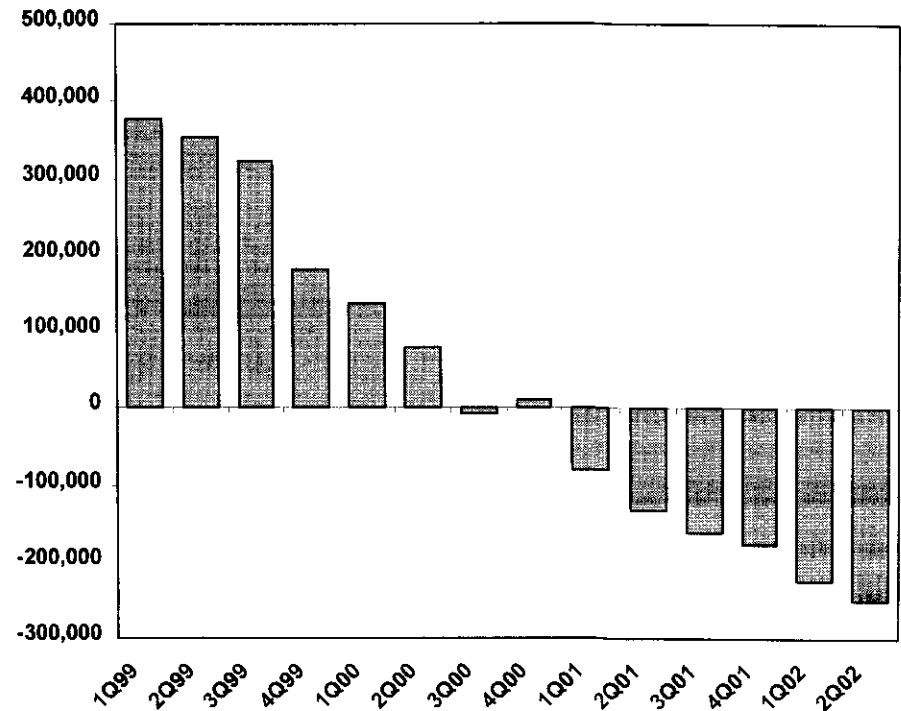


- **Wireless competition and broadband substitution have had a dramatic impact on BellSouth's embedded residential additional line base as well as the Company's ability to drive further penetration. The result has been increasing excess capacity, further pressuring the fixed cost structure of the Company's distribution network.**

Composition of BellSouth's 2.1 million Residential Additional Lines



Quarterly Change in Additional Lines

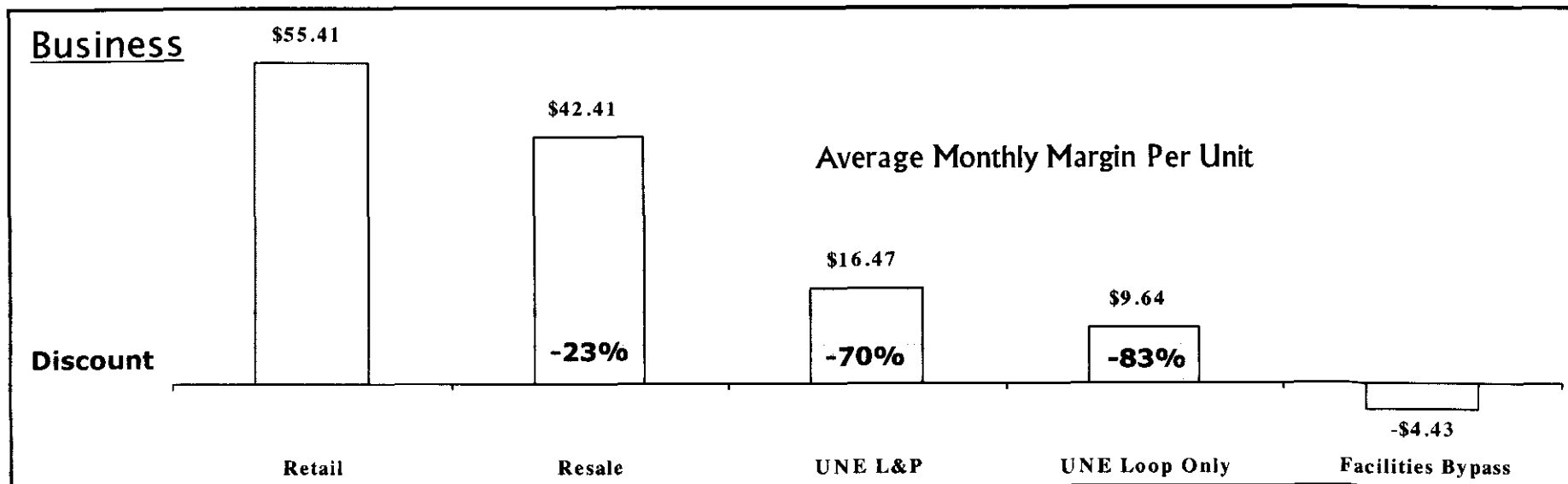
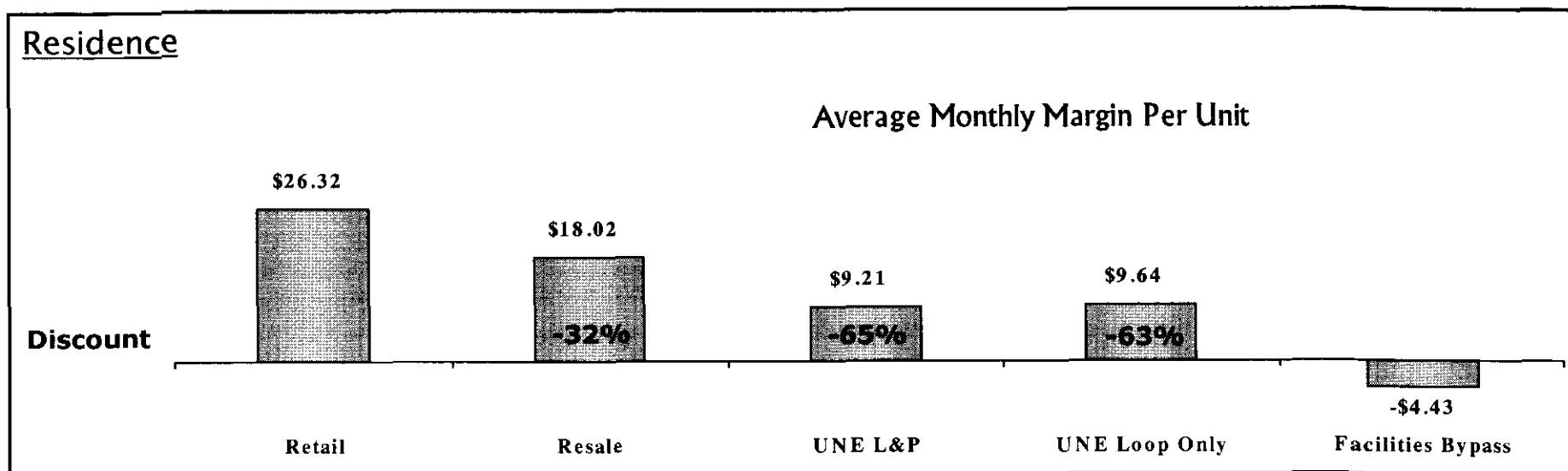




# Wholesale Reductions in Average Margin Per Line

Back-Up

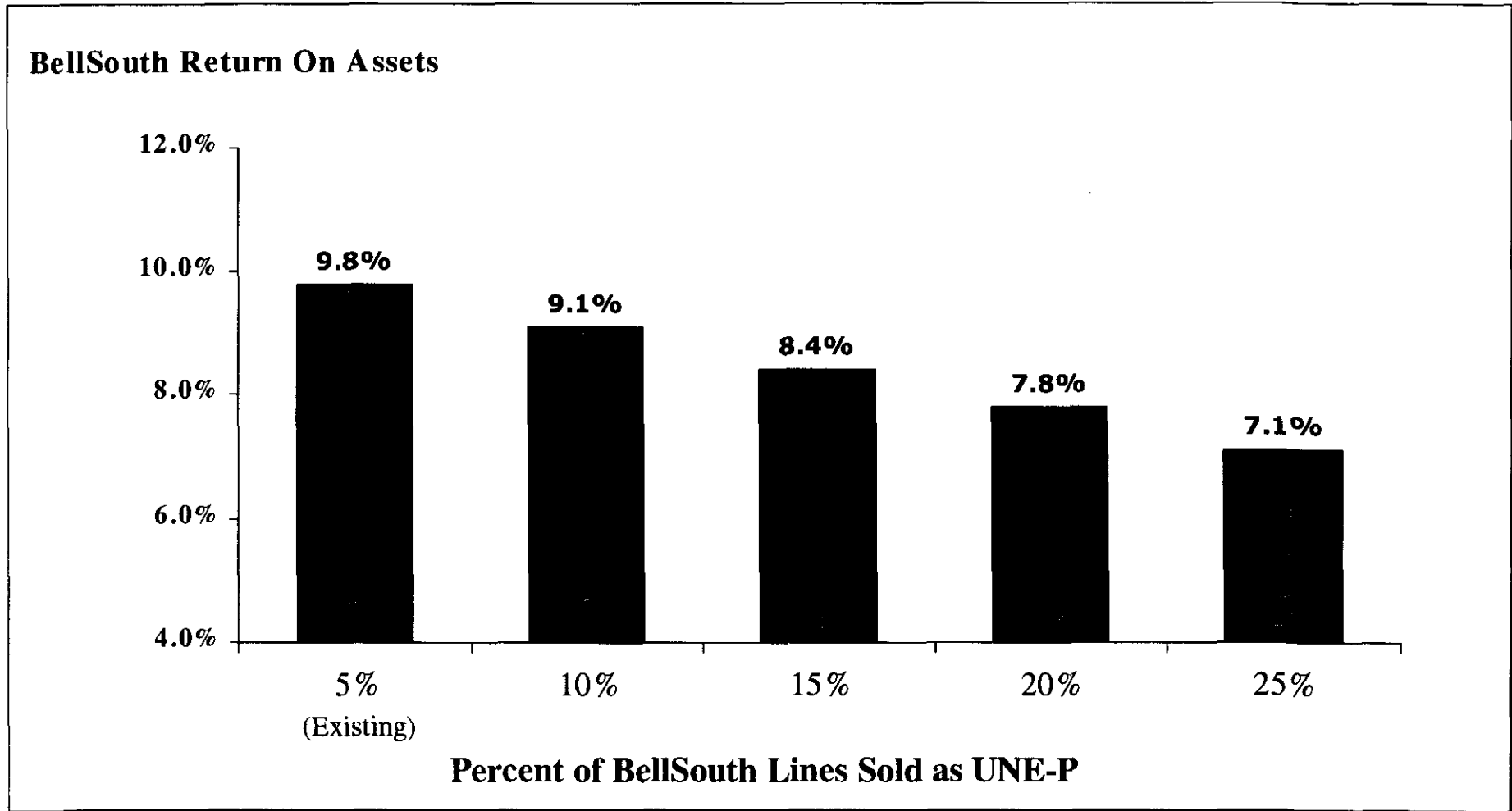
- On a regional basis, BellSouth's margins decline by 65% to 80% under UNE-P pricing relative to retail pricing.

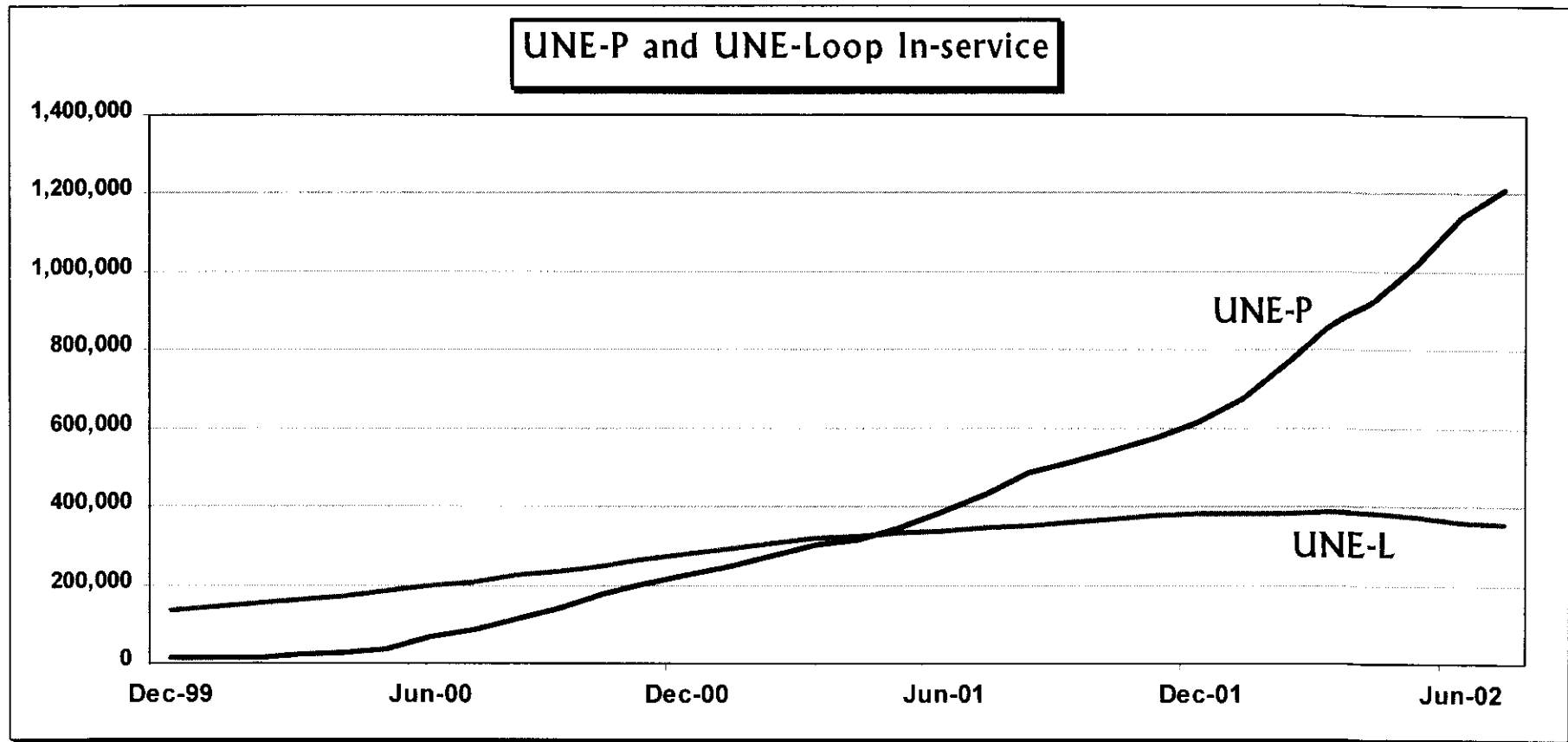


# *Impact of UNE-P Pricing on BellSouth Wireline Profitability*

Back-Up

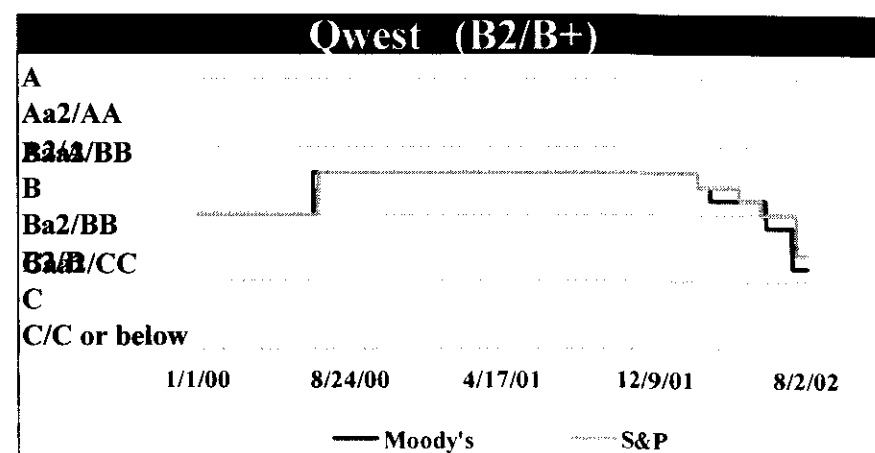
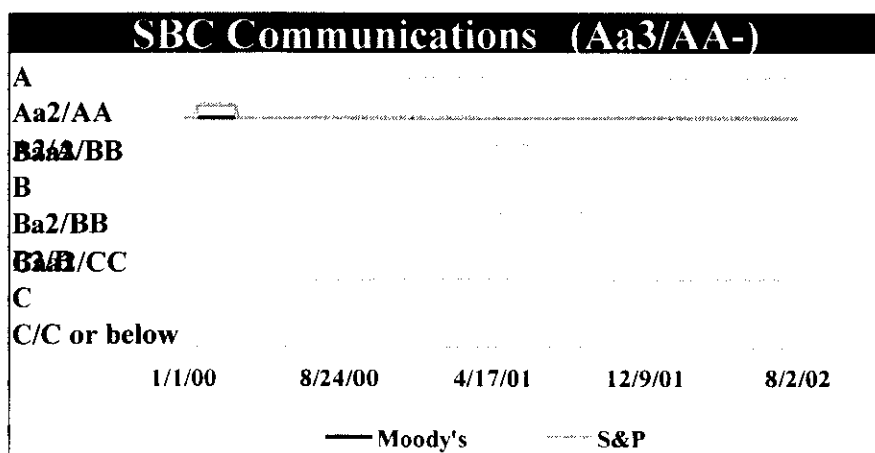
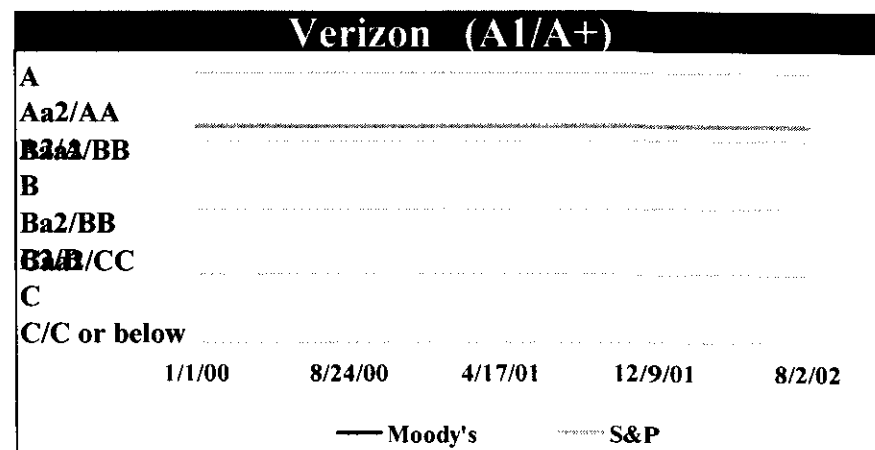
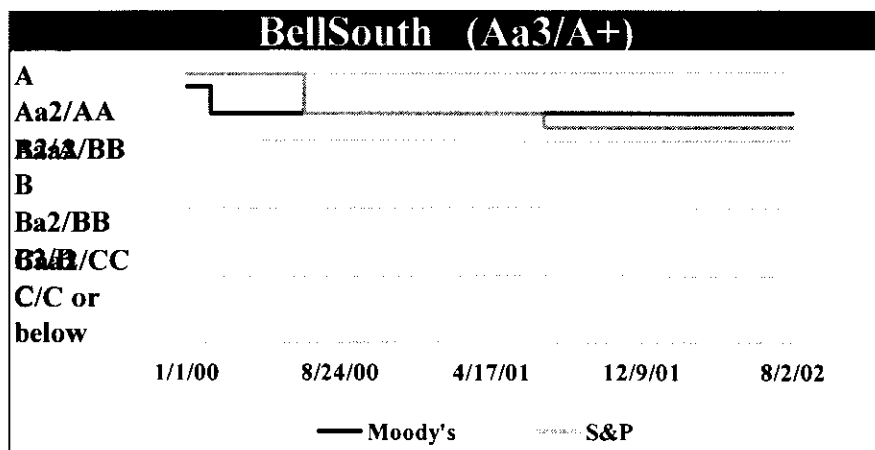
- Based on existing Retail and UNE-P pricing, BellSouth's return on assets will decline by 28% when 25% of its access line base has migrated to the UNE-P platform.





**Six of the seven major domestic wireline telcos have experienced downgrades since 2000** U.S. Telecommunications Industry

◆ Qwest and WorldCom are currently the only two below investment grade

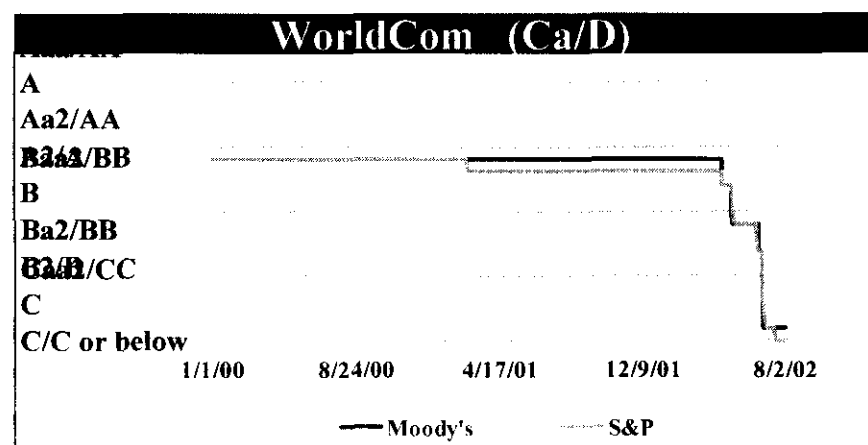
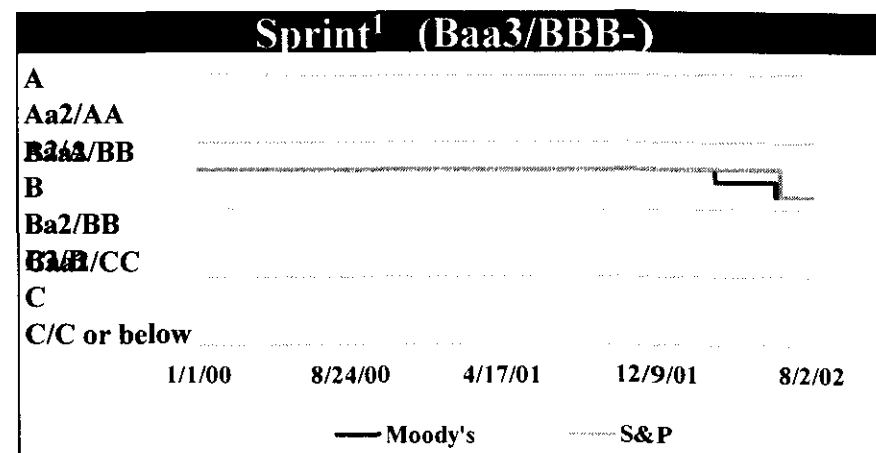
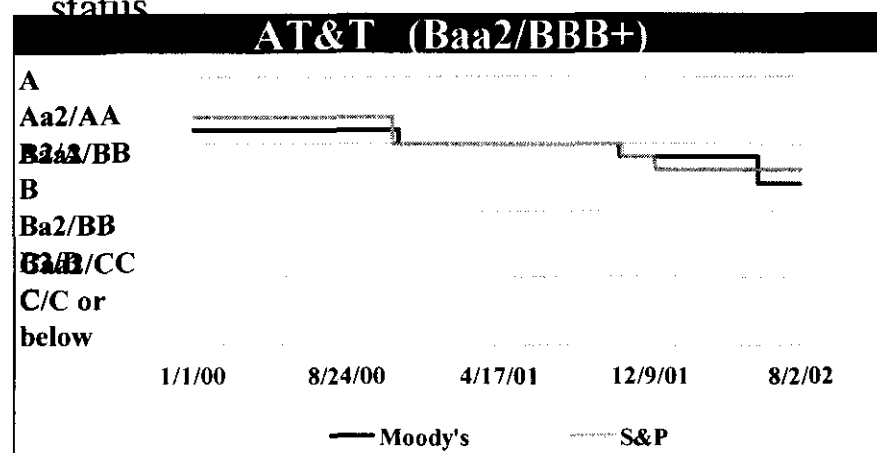


Note: Non-investment grade at B1/BB+ and below.

### Long distance providers have been heavily impacted

U.S. Telecommunications Industry

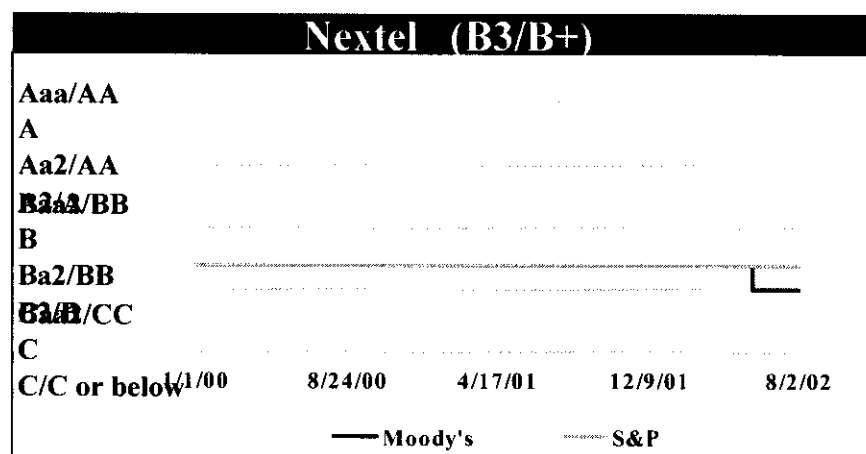
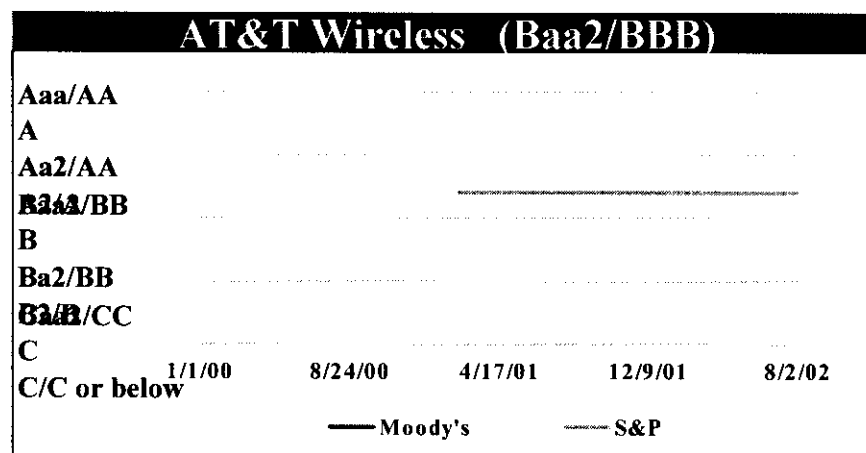
- ◆ WorldCom has filed for Chapter 11 bankruptcy protection
- ◆ Sprint (both agencies) and AT&T (Moody's only) are within two notches of non-investment grade status



Note: Non-investment grade at Ba1/BB+ and below.  
1. Includes FON and PCS.

U.S. Telecommunications Industry

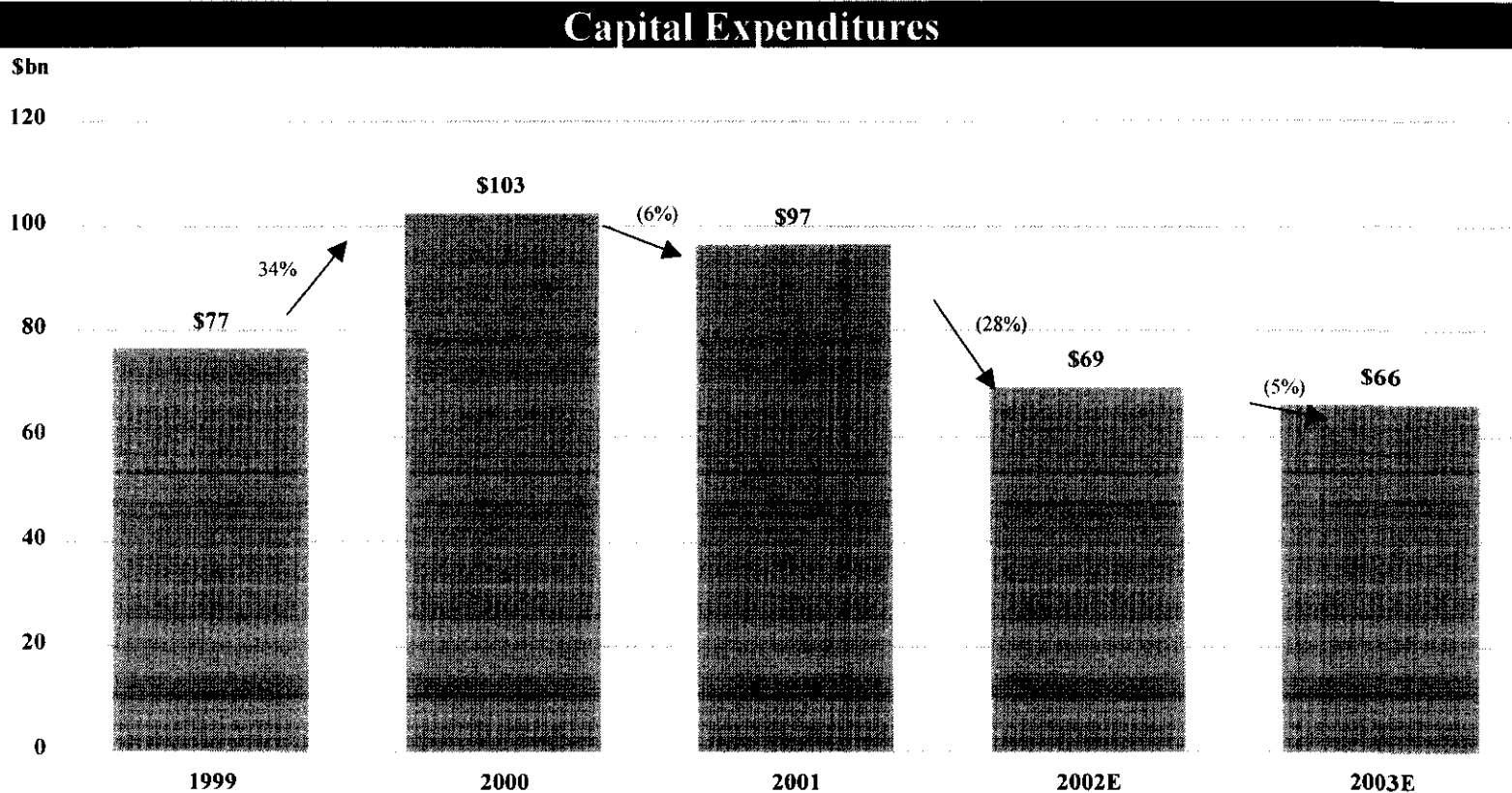
Of the two major publicly traded wireless telcos<sup>1</sup>, Nextel is non-investment grade and AT&T Wireless is within two notches of non-investment grade status



Note. Non-investment grade at Ba1/BB+ and below.  
 1. Excludes Sprint PCS which is a tracking stock of Sprint Corporation.

U.S. Telecommunications Industry

Industry-wide<sup>1</sup> annual capex declined 6% from 2000 to 2001 and is expected to decline an additional 28% in 2002 and 5% in 2003

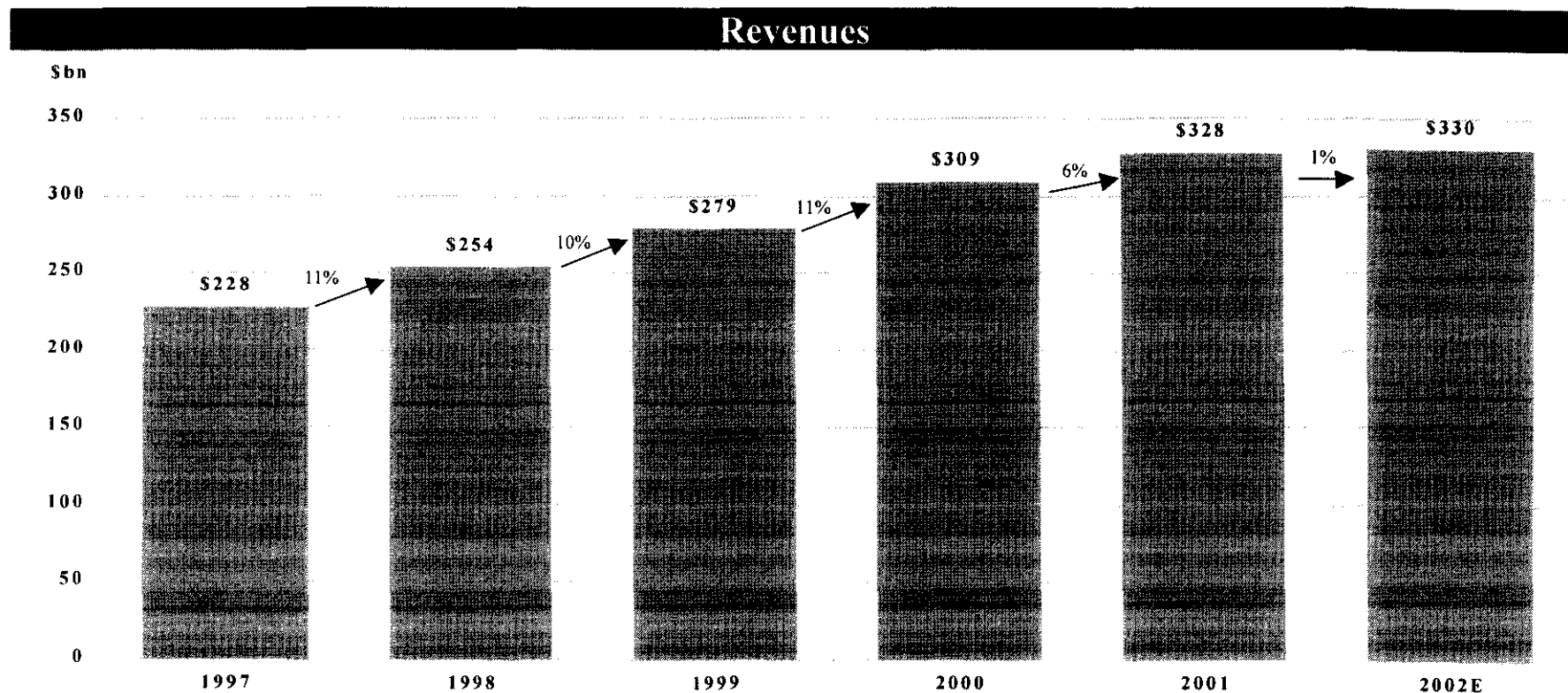


Source: 1999-2002 figures based on Lehman Brothers Equity Research; 2003 figure based on Lehman Brothers estimate

1. Includes BellSouth, Verizon, SBC, Qwest, AT&T (excl. Broadband), Sprint FON, WorldCom, Cingular, Verizon Wireless, Sprint PCS, VoiceStream, Nextel, AT&T Wireless, Intermedia, McLeodUSA/SPLT, XO, Time Warner Telecom, Teligent, Choice One, Alegiance, WinStar, RCN, US LEC, Network Plus, CTC, Focal, Covad, CenturyTel, Alltel, Citizens, Level III, Williams Communications, and Global Crossing.

U.S. Telecommunications Industry

Industry-wide<sup>1</sup> year-on-year revenue growth has fallen from 11% in 1998 to -3% in the first quarter of 2002



Source: Based on Lehman Brothers Equity Research; 2002 first quarter figure based on Lehman Brothers estimate.

1. Includes BellSouth, Verizon, SBC, Qwest, AT&T (excl. Broadband), Sprint FON, WorldCom, Cingular, Verizon Wireless, Sprint PCS, VoiceStream, Nextel, AT&T Wireless, Intermedia, McLeodUSA/SPLT, XO, Time Warner Telecom, Teligent, Choice One, Alegiance, WinStar, RCN, US LEC, Network Plus, CTC, Focal, Covad, CenturyTel, Alltel, Citizens, Level III, Williams Communications, and Global Crossing.



## U.S. Telecommunications Industry

- ◆ Telecom has had the largest number of layoffs of any industry in the last nine out of 12 months, and in 2001
  - » Over 600,000 job cuts have been announced in the telecom sector worldwide since January 2000

### Job Cuts Worldwide in the Telecom Sector since January 2001

Company	Jobs Cut	Company	Jobs Cut	Company	Jobs Cut
Nortel Networks	52,000	Cable and Wireless	5,500	Vodafone	960
Lucent Technologies	50,910	NTL	5,000	Northpoint	948
Motorola	42,900	BellSouth	4,200	One2One	900
Ericsson	42,000	Epcos	3,190	Teligent	900
China Unicom	34,478	France Telecom	3,000	Energis	850
Alcatel	33,000	Elcoteq	3,000	Japan Telecom	850
Matsushita	21,000	Celestica	2,900	360networks	800
Sollectron	20,700	MMO2	2,550	Genuity	770
Siemens	17,000	Molex	2,500	Optus	700
JDS Uniphase	16,000	Level 3 Communications	2,150	Exodus Communications	675
Qwest Communications	13,000	Oki Electric	2,100	Gemplus	567
Marconi	13,000	McLeodUSA	2,075	Excite@Home	500
Corning	12,000	Conexant Systems	2,075	Zarlink (formerly Mitel)	430
Telekomunikacja Polska SA	12,000	Global Crossing	2,000	Telenor	420
WorldCom	11,700	Mitsubishi Electric	2,000	Comverse Technology	400
Philips	11,570	Tellabs	2,000	Pacific Century Cyberworks	340
AT&T	10,000	Winstar	2,000	Openwave	300
ADC	9,500	Flextronics	1,500	Network Access Solutions	295
Sprint	9,000	Telewest	1,500	Bookham Technology	250
Cisco Systems	8,500	Ciena	1,430	Corvis	250
BT Group	8,200	ECI Telecom	1,400	Globalstar	175
Verizon	7,500	Nokia	1,250	Vitesse Semiconductor	150
Agere Systems	7,300	Covad Communications	1,200	Juniper Networks	104
KPN	6,800	Atlantic Telecom	1,073	Orchestream	94
3Com	6,000	Sonera	1,000	<b>TOTAL</b>	<b>547,279</b>

Source: Financial Times, May 14, 2002.

**SUMMARY OF DATA FOR FCC PRESENTATION  
QUESTION #6 AND TSR/S&P 500 P/E QUESTION**

**Equity Value Summary**

<b>in Millions</b>	<b><u>1998</u></b>	<b><u>1999</u></b>	<b><u>2000</u></b>	<b><u>2001</u></b>	<b><u>June-02</u></b>
ILEC	456,779	458,749	449,870	360,690	277,870
IXC	331,078	469,164	176,106	131,244	53,408
CLEC	10,261	46,405	22,147	5,576	2,236
Equipment Makers	312,759	768,785	1,013,414	320,462	266,708
Total	1,110,877	1,743,102	1,661,537	817,972	600,221

**TSR July 2002 YTD**

	<b><u>Total Shareholder Return</u></b>
BellSouth	-28.87%
SBC	-28.35%
Verizon	-29.27%
Qwest	-90.94%
S&P 500	-19.92%

**S&P 500 P/E as of August 7, 2002 market close**

**16.2**

# ILEC

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Company Name	Market Value[Y98]	Market Value[Y99]	Market Value[Y00]	Market Value[Y01]	Market Value[Q202]
BELLSOUTH CORP	97,655	88,195	76,389	71,608	59,045
BROADWING INC	5,158	4,819	4,937	2,070	569
CITIZENS COMMUNICATIONS CO	@NA	@NA	3,481	2,985	2,356
QWEST COMMUNICATION INTL INC	32,447	36,360	68,139	23,526	4,695
SBC COMMUNICATIONS INC	174,717	165,524	161,632	131,672	101,875
VERIZON COMMUNICATIONS	146,801	163,850	135,292	128,828	109,329
<b>Total ILEC</b>	<b>456,779</b>	<b>458,749</b>	<b>449,870</b>	<b>360,690</b>	<b>277,870</b>

Company Name	Market Value[Y98]	Market Value[Y99]	Market Value[Y00]	Market Value[Y01]	Market Value[Q202]
360NETWORKS INC	@NA	@NA	10,376	70	@NA
ASIA GLOBAL CROSSING LTD	@NA	@NA	3,643	693	@NA
AT&T CORP	132,840	162,378	64,750	64,139	38,160
DESTIA COMMUNICATIONS INC	@NA	@NA	@NA	@NA	@NA
FLAG TELECOM HOLDINGS	@NA	@NA	833	215	10
GLOBAL CROSSING LTD	8,762	38,395	12,635	746	@NA
IDT CORP	721	670	1,248	413	1,320
IMPSAT FIBER NETWORKS INC	@NA	@NA	400	16	2
LEVEL 3 COMMUN INC	13,247	27,894	12,047	1,914	1,160
METROMEDIA FIBER NTWK -CL A	3,161	11,150	5,574	271	@NA
NEON COMMUNICATIONS INC	167	1,019	122	54	1
PACIFIC GATEWAY EXCHANGE INC	922	333	1	@NA	@NA
PRIMUS TELECOMM GROUP INC	463	1,100	93	34	45
RSL COMMUNICATIONS -CL A	1,320	940	10	@NA	@NA
SPRINT FON GROUP	36,233	58,656	17,942	19,829	9,903
STARTEC GLOBAL COMMUNICTNS	86	202	56	1	@NA
TALK AMERICA HOLDINGS INC	844	1,099	112	33	337
TYCOM LTD	@NA	@NA	@NA	@NA	@NA
VIATEL INC	530	1,750	188	@NA	@NA
WILLIAMS COMMUNICATIONS GRP	@NA	13,414	5,447	1,153	10
WORLD ACCESS INC	487	871	176	@NA	@NA
WORLDCOM INC-WORLDCOM GROUP	131,295	149,295	40,451	41,663	2,459
<b>Total IXC</b>	<b>331,078</b>	<b>469,164</b>	<b>176,106</b>	<b>131,244</b>	<b>53,408</b>

\* Based on company grouping by year provided by Morgan Stanley August 8, 2002.

# CLEC

Company Name	Market Value[Y98]	Market Value[Y99]	Market Value[Y00]	Market Value[Y01]	Market Value[Q202]
ADELPHIA BUSINESS SOLUTIONS	827	2,645	301	78	@NA
ADVANCED TELECOMMUN-OLD	@NA	@NA	@NA	@NA	@NA
ALLEGIANCE TELECOM INC	610	5,984	2,429	947	212
ATX COMMUNICATIONS INC	208	1,511	350	16	6
CAPROCK COMMUNICATIONS CORP	@NA	@NA	@NA	@NA	@NA
CHOICE ONE COMMUNICATION INC	@NA	@NA	353	132	36
COMMONWLTH TELE ENTER	616	1,169	795	1,065	943
CONVERGENT COMMUNICATIONS	@NA	444	18	@NA	@NA
CT COMMUNICATIONS INC	339	525	265	310	304
ESPIRE COMMUNICATIONS INC	307	294	27	3	@NA
ELEC COMMUNICATIONS CORP	6	24	11	9	1
ELECTRIC LIGHTWAVE -CL A	407	938	168	15	35
FAIRPOINT COMMUNICATIONS INC	@NA	@NA	@NA	@NA	@NA
FOCAL COMMUNICATIONS CORP	@NA	1,463	429	38	12
GST TELECOMM INC	237	341	0	@NA	@NA
GT GROUP TELECOM INC	@NA	@NA	1,546	@NA	8
HICKORY TECH CORP	178	207	284	236	210
I-LINK INC	40	63	22	9	16
ICG COMMUNICATIONS	985	869	16	3	1
INTERMEDIA COMMUNICATNS INC	@NA	@NA	@NA	@NA	@NA
ITC DELTACOM INC	782	1,641	332	54	4
KMC TELECOM HOLDINGS INC	@NA	@NA	@NA	@NA	@NA
MCLEODUSA INC -CL A	@NA	@NA	@NA	@NA	@NA
MPOWER HOLDING CORP	120	1,157	287	27	1
NET2000 COMMUNICATIONS INC	@NA	@NA	66	0	@NA
NETWORK PLUS CORP	@NA	1,145	154	78	@NA
PAC-WEST TELECOM INC	@NA	938	123	20	16
RCN CORP	1,149	3,702	546	285	139
SPLITROCK SERVICES INC	@NA	@NA	@NA	@NA	@NA
TELIGENT INC	1,512	3,341	123	@NA	@NA
TIME WARNER TELECOM INC	@NA	5,220	6,702	2,023	193
US LEC CORP	406	885	133	141	62
USN COMMUNICATIONS INC	@NA	@NA	@NA	@NA	@NA
WINSTAR COMMUNICATIONS	@NA	@NA	@NA	@NA	@NA
XO COMMUNICATIONS INC -CL A	1,531	11,021	6,490	43	9
Z TEL TECHNOLOGIES INC	@NA	881	175	44	29
<b>Total CLEC</b>	<b>10,261</b>	<b>46,405</b>	<b>22,147</b>	<b>5,576</b>	<b>2,236</b>

\* Based on company grouping by year provided by Morgan Stanley August 8, 2002.

# Equipment

Company Name	Market Value[Y98]	Market Value[Y99]	Market Value[Y00]	Market Value[Y01]	Market Value[Q202]
ADC TELECOMMUNICATIONS INC	3,100	6,480	15,155	3,591	3,089
ADTRAN INC	713	1,973	822	985	733
ADVANCED FIBRE COMM INC	826	3,461	1,456	1,447	1,365
ALLEN TELECOM INC	183	320	502	239	131
ANDREW CORP	1,141	1,426	2,125	1,480	1,368
AUDIOVOX CORP -CL A	123	550	211	158	159
AWARE INC	561	790	400	188	86
BEL FUSE INC	208	293	360	269	284
BROOKTROUT INC	185	203	114	79	70
C-COR.NET CORP	174	254	912	388	522
CABLE DESIGN TECH CP -CL A	611	510	1,012	659	565
CIENA CORP	1,762	4,839	29,836	5,321	2,462
CISCO SYSTEMS INC	99,121	199,670	458,128	140,517	145,231
COMMSCOPE INC	827	2,048	849	1,095	772
COMVERSE TECHNOLOGY INC	3,722	10,804	18,776	3,975	1,489
CONCERTO SOFTWARE INC	109	259	126	121	78
CORNING INC	10,400	31,551	46,623	8,224	3,373
DMC STRATEX NETWORKS INC	518	2,359	612	448	@NA
HARMONIC INC	219	2,877	329	709	218
HARRIS CORP	3,575	3,126	2,265	1,791	2,010
INTER-TEL INC -SER A	611	648	203	455	410
JDS UNIPHASE CORP	2,191	6,704	93,748	16,453	10,192
LUCENT TECHNOLOGIES INC	90,985	197,803	102,064	19,540	16,191
MOTOROLA INC	36,648	89,689	44,233	33,431	33,131
NORTEL NETWORKS CORP	33,174	137,524	96,236	23,939	5,446
PLANTRONICS INC	1,046	1,508	874	980	@NA
POLYCOM INC	757	2,091	2,428	2,862	1,200
POWERWAVE TECHNOLOGIES INC	321	1,169	3,696	1,114	599
QUALCOMM INC	3,356	28,378	53,085	36,151	28,876
SCIENTIFIC-ATLANTA INC	1,995	2,751	11,857	6,572	3,741
SYMMETRICOM INC	95	122	381	347	171
TELLABS INC	13,318	25,821	23,194	6,133	2,547
TOLLGRADE COMMUNICATIONS INC	114	199	470	436	199
VIASAT INC	71	587	332	363	@NA
<b>Total Communications Equipment</b>	<b>312,759</b>	<b>768,785</b>	<b>1,013,414</b>	<b>320,462</b>	<b>266,708</b>